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EXAMINER	
LE, MIRANDA	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/699,102	TAKAGI ET AL.	
	Examiner	Art Unit	
	MIRANDA LE	2167	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This communication is responsive to Amendment, filed 01/28/08.

Claims 1-214 are pending in this application. Claims 1, 14 are independent claims. In the Amendment, claims 1, 14 have been amended. This action is made Final.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless:
>
> (e) the invention was described in
>
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or
>
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 10-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Ruttenberg et al. (US Patent No. 7,065,586).

Ruttenberg anticipated independent claims 1, 14 by the following

As per claim 1, Ruttenberg teaches a method for synchronously transferring an amount of local data from a local data storage medium *(i.e. a node configured to send data, Summary)* to a remote data storage medium *(i.e. a node configured to receive data, Summary)* via a communications link having an available bandwidth *(i.e. The resources at each node include receive bandwidth, transmit bandwidth, and available storage space. The values of the resources*

vary as a function of time. In one embodiment, the system further includes a node configured to send and to receive data, Summary) the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the method comprising:

evaluating local user conditions associated with transfer of the local data *(i.e. a transfer module at each node configured to evaluate a data transfer request in view of satisfying objectives in accordance with resources at each node, Summary, col. 3, lines 39-50)*;

based on the currently available bandwidth *(i.e. estimated bandwidths at each node, col. 3, lines 39-50)* and the amount of local data *(i.e. the size of the file, col. 6, lines 27-45)*, approximating a transfer time *(i.e. estimated transmission times, col. 4, line 41 to col. 5, line 2; the size of the file to transfer divided by the available bandwidth, col. 6, lines 27-45)* for the local data *(i.e. Further details of an embodiment of scheduling module 320 are illustrated in FIG. 7A. In this embodiment scheduling module 320 includes a feasibility test 710 and a preemption module 740. Feasibility test 710 receives the identities of a sender 220 (or intermediary 230) and a receiver 210, the size of the file to transfer, a maximum bandwidth receiver 210 can accept, a deadline, and information about available and committed bandwidth resources. Using this information feasibility test 710 determines if the transfer is "feasible" or "infeasible." A basic function of feasibility test 710 includes a comparison of the time remaining before the transfer deadline with the size of the file to transfer divided by the available bandwidth. In alternative embodiments this basic function is augmented by consideration of the total bandwidth that is*

already committed to other data transfers. Each of the other data transfers considered includes a file size and expected transfer rate used to calculate the amount of the total bandwidth their transfer will require, col. 6, lines 27-45);

based on the approximated transfer time *(i.e. estimated transmission times, col. 4, line 41 to col. 5, line 2)* the local user conditions, and a status of the local processor, selecting a time *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320, col. 4, line 41 to col. 5, line 2)* to transmit the local data to the remote data storage medium *(i.e. As illustrated in FIG. 7B, an alternative to feasibility test 710 is explicit scheduling routine 720. Explicit scheduling routine 720 uses a detailed schedule of uncommitted space and bandwidth resources at its node. The detailed schedule includes, for example, available receive bandwidth and space as a function of time at receiver 210, and available transmit bandwidth as a function of time at sender 220. An embodiment of explicit scheduling routine 720 is illustrated by the following example. The scheduled resources are receive bandwidth, transmit bandwidth, and storage space. For each scheduled resource, each node (sender 220, receiver 210, and intermediary 230) is configured with a step function (a function f with a constant value on each of a finite number of intervals, e.g., f(x)=0 for x<0, f(x)=2 for 0<=x<1, and f(x)=3 for 1 <=x<5, f(x)=1 for 5<=x) describing the total amount of the resource as a function of time. Other step functions, for example representing the amounts of resources allocated, resources available, and resources reserved, are maintained for each scheduled resource throughout the scheduling process. The total amount of resources is equal to the sum of the amount of resources allocated, the amount of resources available, and the amount of resources reserved, col. 7, lines 1-23)*; and

automatically arranging transfer *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320, col. 4, line 41 to col. 5, line 2)* of the local data to the remote data storage medium via the communications link at the selected time *(i.e. Admission control module 310 receives requests for data transfers from a user, determines the feasibility of the requested transfers in view of various objectives, and accepts or denies each request. Admission control module 310 queries routing module 330 to identify possible sources of the requested data. Scheduling module 320 evaluates the feasibility of a transfer from each of the sources identified by routing module 330 and reports back to admission control module 310. Execution module 340 manages accepted data transfers and works with other modules to compensate for unexpected events that occur during a data transfer. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320. Slack module 350 uses statistical estimates and historical performance data to determine an amount of available resources that should be uncommitted (reserved) in anticipation of differences between actual (measured) and estimated transmission times. Padding module 360 uses statistical models to determine how close to deadlines transfer module 240 should attempt to complete transfers. Priority module 370 determines which transfers should be allowed to preempt other transfers. Preemption is based on priorities given by users, deadlines, confidence of transfer time estimates, or other appropriate criteria. Error recovery module 380 assures that the operations controlled by transfer module 240 can be returned to a consistent state if an unanticipated event occurs. The functionalities of the modules of transfer module 240 are further discussed below, col. 4, line 41 to col. 5, line 2).*

As per claim 14, Ruttenberg teaches an apparatus for synchronously transferring an amount of local data from a local data storage medium *(i.e. a node configured to send data, Summary)* to a remote data storage medium *(i.e. a node configured to receive data, Summary)* via a communications link having an available bandwidth *(i.e. The resources at each node include receive bandwidth, transmit bandwidth, and available storage space. The values of the resources vary as a function of time. In one embodiment, the system further includes a node configured to send and to receive data, Summary)*, the local data storage medium associated with a local computer system having a local processor sequentially responsive to a plurality of local computer programs, the remote data storage medium associated with a remote computer system non-redundant of the local computer system and having a remote processor, the apparatus comprising:

a computer-readable storage medium *(i.e. FIG. 2 is a block diagram of a communication network 200 according to one embodiment of the invention. Communication network 200 includes a receiver 210, a sender 220, and intermediaries 230, each coupled via a path 230 to network 140. Receiver 210 is a computing device, such as a general purpose computer, a set-top box, or an Internet appliance, and includes a local storage 170. Sender 220 is a computing device, such as a web server or other appropriate electronic networking device. Intermediary 230 is a computing device, such as a server, that includes local storage 160 for storage of data. Receiver 210, sender 220, and intermediaries 230 each include embodiments of a transfer module 240. The contents and functionality of transfer module 240 is discussed below in conjunction with FIGS. 3 7C, col. 3, lines 10-24)*; and

a processor responsive to the computer-responsive to the computer-readable storage medium and to a computer program, the computer program, when loaded into the processor *(See Fig. 2)*, operative to perform a method comprising:

evaluating local user conditions associated with transfer of the local data *(i.e. Transfer module 240 at each node evaluates a data transfer request in view of satisfying various objectives, for example meeting a deadline for completion of the transfer, minimizing the cost of bandwidth, a combination of these two objectives, or any other appropriate objectives. In one embodiment, transfer module 240 evaluates a data transfer request using known and estimated bandwidths at each node and known and estimated storage space at receiver 210 and intermediaries 230. Transfer module 240 rejects (denies) a data transfer request if known storage space and bandwidth limits suggest that a deadline for the data transfer may not be achieved or other objectives cannot be met, col. 3, lines 39-50)*;

based on the currently available bandwidth *(i.e. estimated bandwidths at each node, col. 3, lines 39-50)* and the amount of local data *(i.e. the size of the file, col. 6, lines 27-45)*, approximating a transfer time *(i.e. estimated transmission times, col. 4, line 41 to col. 5, line 2; the size of the file to transfer divided by the available bandwidth, col. 6, lines 27-45)* for the local data *(i.e. Further details of an embodiment of scheduling module 320 are illustrated in FIG. 7A. In this embodiment scheduling module 320 includes a feasibility test 710 and a preemption module 740. Feasibility test 710 receives the identities of a sender 220 (or intermediary 230) and a receiver 210, the size of the file to transfer, a maximum bandwidth receiver 210 can accept, a deadline, and information about available and committed bandwidth resources. Using this information feasibility test 710 determines if the transfer is "feasible" or "infeasible." A basic*

function of feasibility test 710 includes a comparison of the time remaining before the transfer deadline with the size of the file to transfer divided by the available bandwidth. In alternative embodiments this basic function is augmented by consideration of the total bandwidth that is already committed to other data transfers. Each of the other data transfers considered includes a file size and expected transfer rate used to calculate the amount of the total bandwidth their transfer will require, col. 6, lines 27-45);

based on the approximated transfer time *(i.e. estimated transmission times, col. 4, line 41 to col. 5, line 2)* the local user conditions, and a status of the local processor, selecting a time *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320, col. 4, line 41 to col. 5, line 2)* to transmit the local data to the remote data storage medium *(i.e. As illustrated in FIG. 7B, an alternative to feasibility test 710 is explicit scheduling routine 720. Explicit scheduling routine 720 uses a detailed schedule of uncommitted space and bandwidth resources at its node. The detailed schedule includes, for example, available receive bandwidth and space as a function of time at receiver 210, and available transmit bandwidth as a function of time at sender 220. An embodiment of explicit scheduling routine 720 is illustrated by the following example. The scheduled resources are receive bandwidth, transmit bandwidth, and storage space. For each scheduled resource, each node (sender 220, receiver 210, and intermediary 230) is configured with a step function (a function f with a constant value on each of a finite number of intervals, e.g., f(x)=0 for x<0, f(x)=2 for 0<=x<1, and f(x)=3 for 1 <=x<5, f(x)=1 for 5<=x) describing the total amount of the resource as a function of time. Other step functions, for example representing the amounts of resources allocated, resources available, and resources*

reserved, are maintained for each scheduled resource throughout the scheduling process. The total amount of resources is equal to the sum of the amount of resources allocated, the amount of resources available, and the amount of resources reserved, col. 7, lines 1-23); and

automatically arranging transfer *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320, col. 4, line 41 to col. 5, line 2)* of the local data to the remote data storage medium via the communications link at the selected time *(i.e. Admission control module 310 receives requests for data transfers from a user, determines the feasibility of the requested transfers in view of various objectives, and accepts or denies each request. Admission control module 310 queries routing module 330 to identify possible sources of the requested data. Scheduling module 320 evaluates the feasibility of a transfer from each of the sources identified by routing module 330 and reports back to admission control module 310. Execution module 340 manages accepted data transfers and works with other modules to compensate for unexpected events that occur during a data transfer. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320. Slack module 350 uses statistical estimates and historical performance data to determine an amount of available resources that should be uncommitted (reserved) in anticipation of differences between actual (measured) and estimated transmission times. Padding module 360 uses statistical models to determine how close to deadlines transfer module 240 should attempt to complete transfers. Priority module 370 determines which transfers should be allowed to preempt other transfers. Preemption is based on priorities given by users, deadlines, confidence of transfer time estimates, or other appropriate criteria. Error*

recovery module 380 assures that the operations controlled by transfer module 240 can be returned to a consistent state if an unanticipated event occurs. The functionalities of the modules of transfer module 240 are further discussed below, col. 4, line 41 to col. 5, line 2).

As per claim 2, Ruttenberg teaches a computer-readable medium encoded with a computer program which, when loaded into a processor, implements the method of claim 1 *(i.e. FIG. 2 is a block diagram of a communication network 200 according to one embodiment of the invention. Communication network 200 includes a receiver 210, a sender 220, and intermediaries 230, each coupled via a path 230 to network 140. Receiver 210 is a computing device, such as a general purpose computer, a set-top box, or an Internet appliance, and includes a local storage 170. Sender 220 is a computing device, such as a web server or other appropriate electronic networking device. Intermediary 230 is a computing device, such as a server, that includes local storage 160 for storage of data. Receiver 210, sender 220, and intermediaries 230 each include embodiments of a transfer module 240. The contents and functionality of transfer module 240 is discussed below in conjunction with FIGS. 3 7C, col. 3, lines 10-24).*

As per claim 3, Ruttenberg teaches the computer-readable medium according to claim 2, wherein the computer program comprises one of the plurality of local computer-program, and the processor comprise the local processor *(i.e. FIG. 2 is a block diagram of a communication network 200 according to one embodiment of the invention. Communication network 200 includes a receiver 210, a sender 220, and intermediaries 230, each coupled via a path 230 to*

network 140. Receiver 210 is a computing device, such as a general purpose computer, a set-top box, or an Internet appliance, and includes a local storage 170. Sender 220 is a computing device, such as a web server or other appropriate electronic networking device. Intermediary 230 is a computing device, such as a server, that includes local storage 160 for storage of data. Receiver 210, sender 220, and intermediaries 230 each include embodiments of a transfer module 240. The contents and functionality of transfer module 240 is discussed below in conjunction with FIGS. 3 7C, col. 3, lines 10-24).

As per claim 4, Ruttenberg teaches the computer-readable medium according to claim 2, wherein the processor comprises the remote processor *(i.e. FIG. 2 is a block diagram of a communication network 200 according to one embodiment of the invention. Communication network 200 includes a receiver 210, a sender 220, and intermediaries 230, each coupled via a path 230 to network 140. Receiver 210 is a computing device, such as a general purpose computer, a set-top box, or an Internet appliance, and includes a local storage 170. Sender 220 is a computing device, such as a web server or other appropriate electronic networking device. Intermediary 230 is a computing device, such as a server, that includes local storage 160 for storage of data. Receiver 210, sender 220, and intermediaries 230 each include embodiments of a transfer module 240. The contents and functionality of transfer module 240 is discussed below in conjunction with FIGS. 3 7C, col. 3, lines 10-24).*

As per claim 5, Ruttenberg teaches the method according to claim 1, further comprising: automatically transmitting the local data to the remote data storage medium at the selected time

(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320, col. 4, line 41 to col. 5, line 2).

As per claim 6, Ruttenberg teaches the method according to claim 1, further comprising: automatically arranging for interruption of transfer of the local data bases on the status of the local processor *(i.e. Error recovery module 380 also minimizes the amount of extra data transferred in completing interrupted transfers and the number of accepted requests that are canceled as a result of failures and timeouts. Data is stored in each node regarding requests accepted by scheduling module 320, resource allocation, the state of each transfer in progress, waiting lists 735 (if these are supported), and any state required to describe routing policies (e.g., proxy lists). Error recovery module 380 uses this information to restart data transfers at each node, col. 12, lines 38-54).*

As per claim 7, Ruttenberg teaches the method according to claim 6, further comprising: automatically interrupting transfer of the local data based on the status of the local processor *(i.e. Error recovery module 380 also minimizes the amount of extra data transferred in completing interrupted transfers and the number of accepted requests that are canceled as a result of failures and timeouts. Data is stored in each node regarding requests accepted by scheduling module 320, resource allocation, the state of each transfer in progress, waiting lists 735 (if these are supported), and any state required to describe routing policies (e.g., proxy lists). Error*

recovery module 380 uses this information to restart data transfers at each node, col. 12, lines 38-54).

As per claim 8, Ruttenberg teaches the method according to claim 6, wherein the status of the local processor is inferred from one of: status of a display device, a status of a memory; a configured processor utilization; and a time since a last interactive use of the local computer system *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to dynamic conditions that are not under the control of scheduling module 320. Slack module 350 uses statistical estimates and historical performance data to determine an amount of available resources that should be uncommitted (reserved) in anticipation of differences between actual (measured) and estimated transmission times. Padding module 360 uses statistical models to determine how close to deadlines transfer module 240 should attempt to complete transfers. Priority module 370 determines which transfers should be allowed to preempt other transfers. Preemption is based on priorities given by users, deadlines, confidence of transfer time estimates, or other appropriate criteria. Error recovery module 380 assures that the operations controlled by transfer module 240 can be returned to a consistent state if an unanticipated event occurs. The functionalities of the modules of transfer module 240 are further discussed below, col. 4, line 41 to col. 5, line 2).*

As per claim 10, Ruttenberg teaches the method according to claim 6, further comprising: after automatically arranging for interruption of transfer of the local data, automatically arranging for resumption of transfer of the local data based on the status of the

local processor *(i.e. Error recovery module 380 also minimizes the amount of extra data transferred in completing interrupted transfers and the number of accepted requests that are canceled as a result of failures and timeouts. Data is stored in each node regarding requests accepted by scheduling module 320, resource allocation, the state of each transfer in progress, waiting lists 735 (if these are supported), and any state required to describe routing policies (e.g., proxy lists). Error recovery module 380 uses this information to restart data transfers at each node, col. 12, lines 38-54).*

As per claim 11, Ruttenberg teaches the method according to claim 10, further comprising: automatically resuming transfer of the local data based on the status of the local processor *(i.e. Error recovery module 380 also minimizes the amount of extra data transferred in completing interrupted transfers and the number of accepted requests that are canceled as a result of failures and timeouts. Data is stored in each node regarding requests accepted by scheduling module 320, resource allocation, the state of each transfer in progress, waiting lists 735 (if these are supported), and any state required to describe routing policies (e.g., proxy lists). Error recovery module 380 uses this information to restart data transfers at each node, col. 12, lines 38-54).*

As per claim 12, Ruttenberg teaches the method according to claim 1, wherein the local user conditions comprise one of: a location of the local data; a preferred transfer time; a file extension associated with the local data; and a status of the communication link *(i.e. Execution module 340 operates under the guidance of scheduling module 320, but also responds to*

dynamic conditions that are not under the control of scheduling module 320. Slack module 350 uses statistical estimates and historical performance data to determine an amount of available resources that should be uncommitted (reserved) in anticipation of differences between actual (measured) and estimated transmission times. Padding module 360 uses statistical models to determine how close to deadlines transfer module 240 should attempt to complete transfers. Priority module 370 determines which transfers should be allowed to preempt other transfers. Preemption is based on priorities given by users, deadlines, confidence of transfer time estimates, or other appropriate criteria. Error recovery module 380 assures that the operations controlled by transfer module 240 can be returned to a consistent state if an unanticipated event occurs. The functionalities of the modules of transfer module 240 are further discussed below, col. 4, line 41 to col. 5, line 2).

As per claim 13, Ruttenberg teaches the method according to claim 1, wherein the remote processor and the local processor are under independent control *(i.e. FIG. 2 is a block diagram of a communication network 200 according to one embodiment of the invention. Communication network 200 includes a receiver 210, a sender 220, and intermediaries 230, each coupled via a path 230 to network 140. Receiver 210 is a computing device, such as a general purpose computer, a set-top box, or an Internet appliance, and includes a local storage 170. Sender 220 is a computing device, such as a web server or other appropriate electronic networking device. Intermediary 230 is a computing device, such as a server, that includes local storage 160 for storage of data. Receiver 210, sender 220, and intermediaries 230 each include*

embodiments of a transfer module 240. The contents and functionality of transfer module 240 is discussed below in conjunction with FIGS. 3 7C, col. 3, lines 10-24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ruttenberg et al. (US Patent No. 7,065,586), in view of Roberts et al. (US Patent No. 6,920,110).

As per claim 9, Ruttenberg does not specifically teach the method according to claim 8, wherein the status of the display device comprises activation of a screen-saver.

Roberts teaches this limitation *(i.e. The relatively low level of actual network bandwidth utilization shown from T.sub.5 through T.sub.8 (FIG. 4) is sometimes referred to as "network*

idle." This concept differs from "machine idle," which occurs when a PC user is not currently using the keyboard or mouse. If the machine remains idle for a period of time, a screen saver may be invoked, col. 7, line 59 to col. 8, line 12).

It would have been obvious to one of ordinary skill of the art having the teaching of Ruttenberg, and Roberts at the time the invention was made to modify the system of Ruttenberg to include the limitations as taught by Roberts. One of ordinary skill in the art would be motivated to make this combination in order to transfer a set of data, such as a software update, over a network at a time when the network utilization is relatively low in view of Roberts (col. 7, line 59 to col. 8, line 12), as doing so would give the added benefit of allowing effective utilization of the network bandwidth while also allowing an adaptation that supports a degree of responsiveness both on fast and slow networks, as taught by Roberts (Summary).

Response to Arguments

6. With respect to claims 1-14, Applicants have amended the independent claim 1, 14 to recite "based on the currently available bandwidth and the amount of local data, approximating a transfer time for the local data "; however, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Miranda Le whose telephone number is (571) 272-4112. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Cottingham, can be reached on (571) 272-7079. The fax number to this Art Unit is (571)-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Miranda Le/
Primary Examiner, Art Unit 2167